



INCITE Overview

January 18, 2011



Julia C. White, INCITE Manager

whitejc@DOEleadershipcomputing.org

What is INCITE?

INCITE: Innovative and Novel Computational Impact on Theory and Experiment

Provides awards to academic, government, and industry organizations worldwide needing large allocations of computer time, supporting resources, and data storage to pursue transformational advances in science and technology

INCITE is jointly run by the ALCF and OLCF, managed by Julia White



INCITE is open to researchers worldwide from academic, government, and industry organizations

Advancing the state of the art across a range of disciplines

Accelerator physics

Astrophysics

Bioenergy

Chemical sciences

Computer science

Engineering

Climate research

Environmental science

Life sciences

Materials science

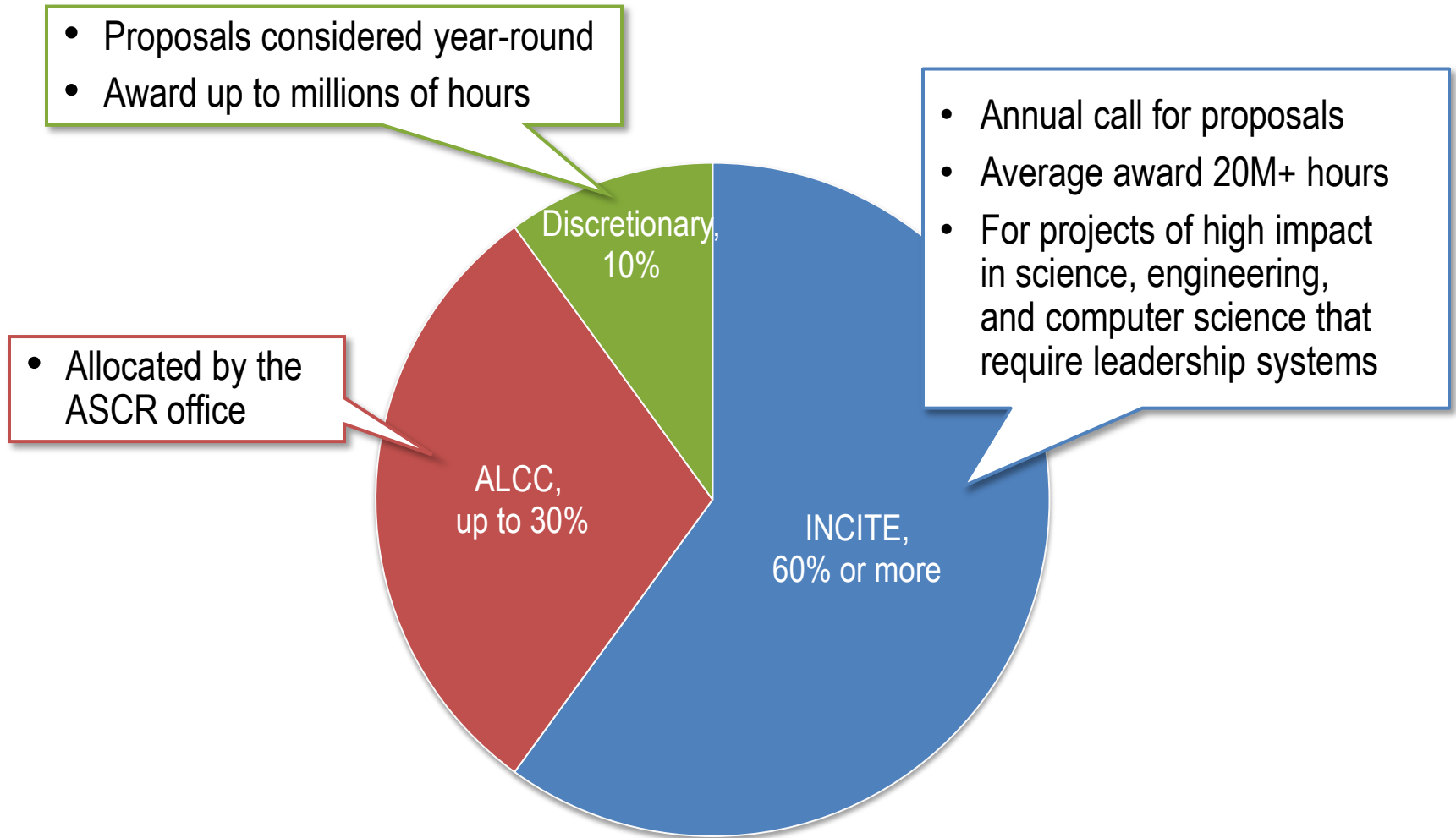
Fusion energy

Nuclear physics

- No designated number of hours for a particular science area
- INCITE focuses on potential for scientific or technological impact, then readiness

LCF allocation programs

More than 2.7 billion processor hours



INCITE mission goals

INCITE seeks projects that meet specific criteria

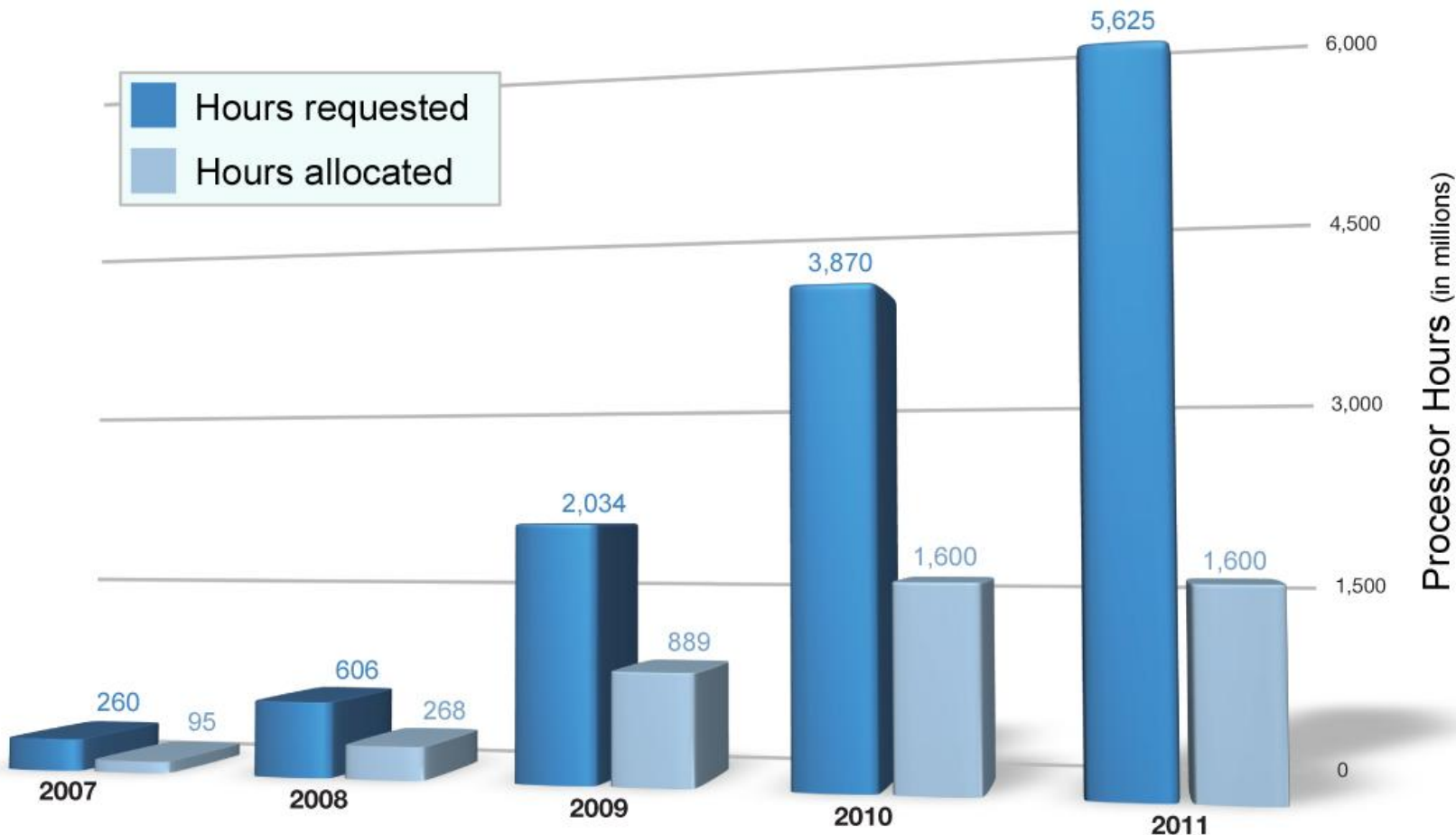
1 Impact criterion

- High-impact science and engineering with specific objectives

2 Computational leadership criteria

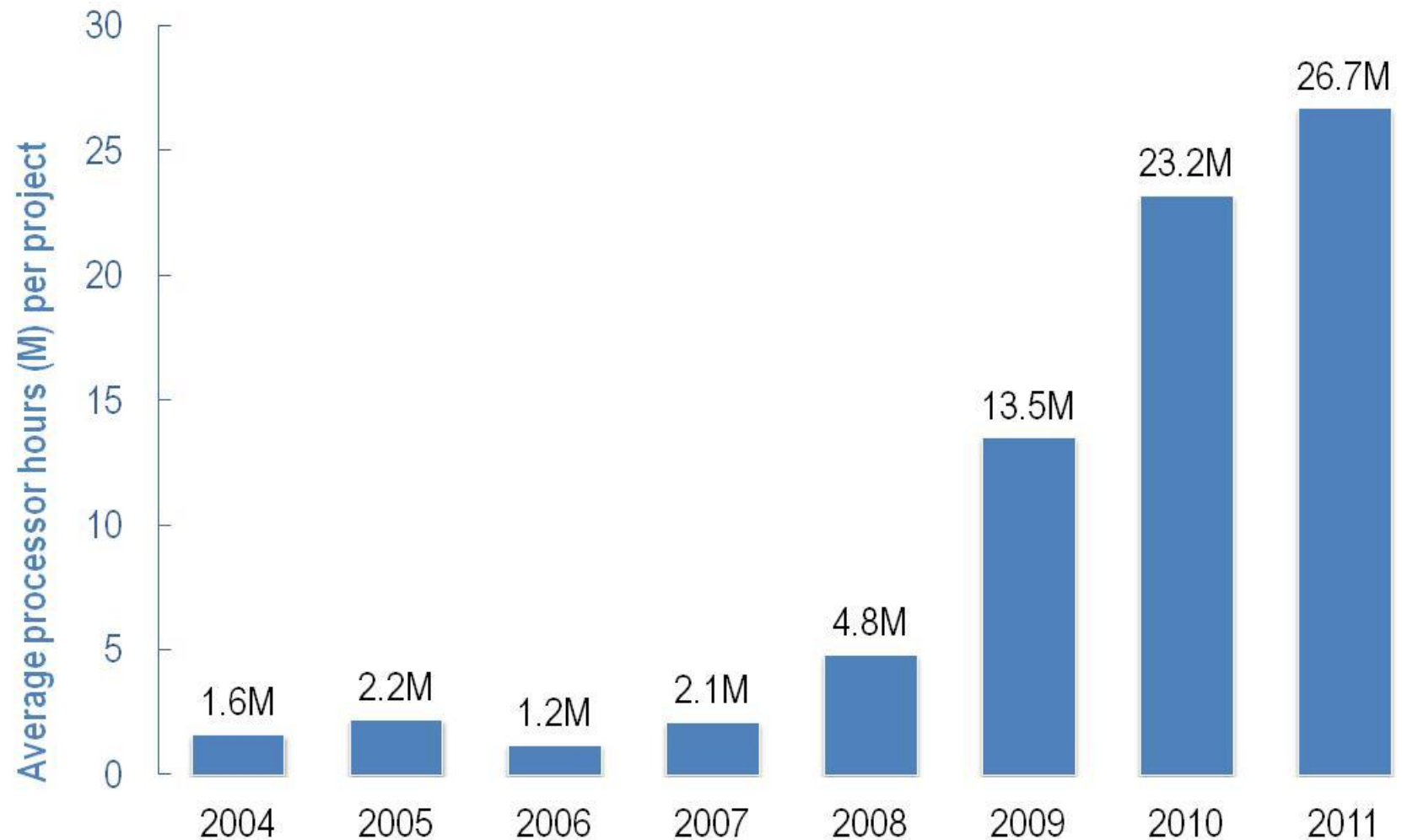
- Computationally intensive runs that cannot be done anywhere else (typically use 20% of the LCF system for production jobs)
- Campaign that requires tens of millions of CPU hours
- Computations that are efficient on INCITE's LCF systems

Growing demand for INCITE hours



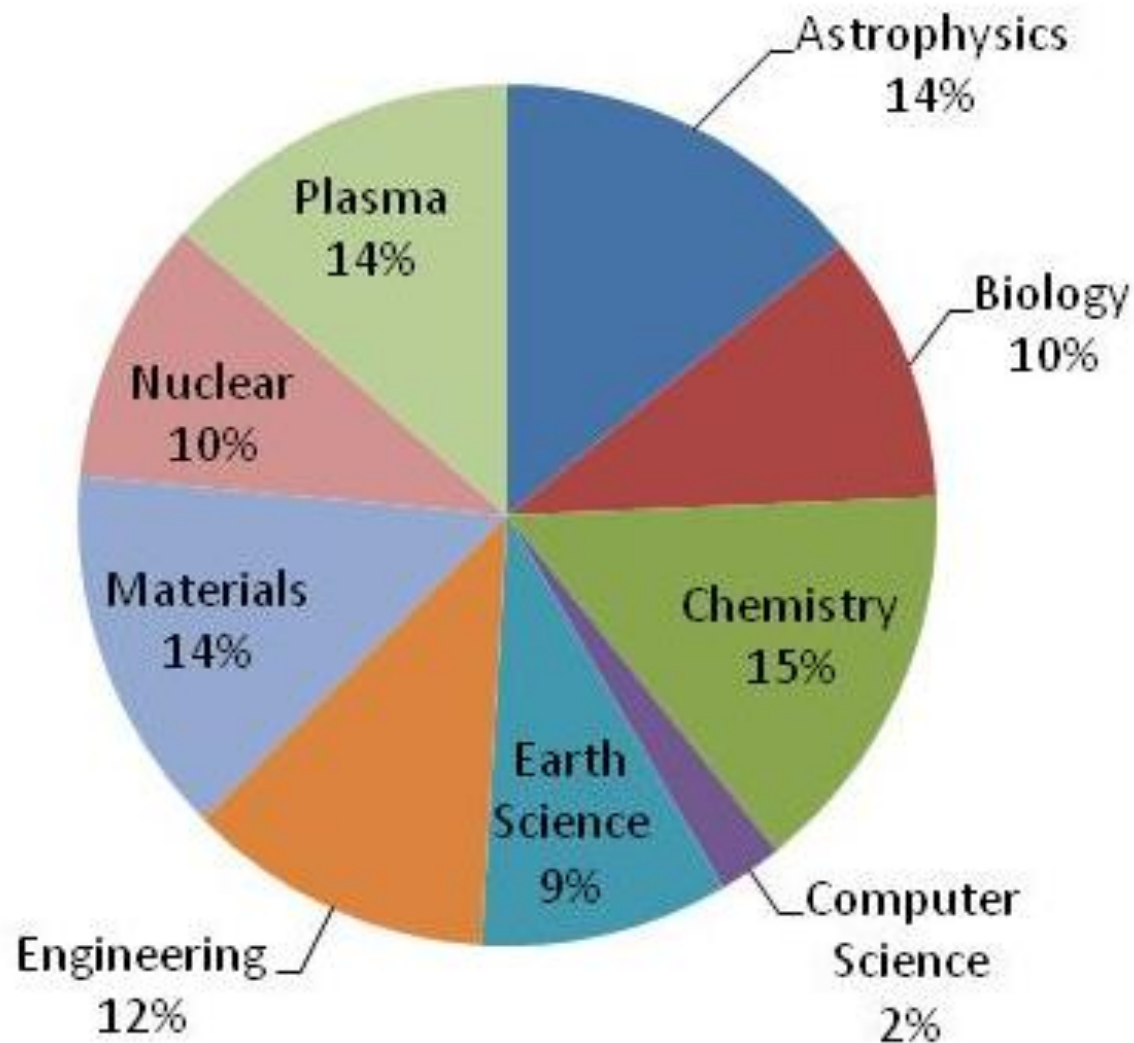
INCITE Demand

INCITE awards have increased in size



INCITE 2011 allocations by domain:

32 new projects and 25 renewal projects



What's next

- Let LCF staff know if you're having difficulties
- Respond to requests for information (ex. quarterly reports)
- Acknowledge the center and INCITE program

- **Communicate your successes**

The mission of INCITE is to enable high-impact, transformational scientific and technology

- April 13 – June 30, 2011:
2012 INCITE call for proposals/renewals

What we're looking for

	New proposal assessment	Renewal assessment
1 Peer review: INCITE panels	<ul style="list-style-type: none">• Scientific and/or technical merit• Appropriateness of proposal method, milestones given• Team qualifications• Reasonableness of requested resources	<ul style="list-style-type: none">• Change in scope• Met scientific milestones• On track to meet future milestones
2 Computational readiness review: LCF centers	<ul style="list-style-type: none">• Appropriateness for requested resources and computational approach• Technical readiness	<ul style="list-style-type: none">• Met technical/computational milestones• On track to meet future milestones

Contacts

For details about the INCITE program:

<http://hpc.science.doe.gov>

INCITE@DOEleadershipcomputing.org

